Table 4: Eligible Activities by Program

Eligible Activities	HMGP	PDM	FMA	RFC	SRL
Mitigation Projects	√	1	4	V	1
Property Acquisition and Structure Demolition	1	1	4	1	$\sqrt{}$
Property Acquisition and Structure Relocation	1	1	1	4	1
Structure Elevation	1	V	1	1	1
Mitigation Reconstruction					$\sqrt{}$
Dry Floodproofing of Historic Residential Structures	1	1	1	1	$\sqrt{}$
Dry Floodproofing of Non-residential Structures	√	1	1	1	
Minor Localized Flood Reduction Projects	1	1	1	1	1
Structural Retrofitting of Existing Buildings	1	1			
Non-structural Retrofitting of Existing Buildings and Facilities	√	1			
Safe Room Construction	1	1			
Infrastructure Retrofit	1	1			
Soil Stabilization	4	1			
Wildfire Mitigation	1	1			
Post-Disaster Code Enforcement	1				
5% Initiative Projects	1				
Hazard Mitigation Planning	1	1	1		
Management Costs	1	1	1	1	1
	Mitigation Projects Property Acquisition and Structure Demolition Property Acquisition and Structure Relocation Structure Elevation Mitigation Reconstruction Dry Floodproofing of Historic Residential Structures Dry Floodproofing of Non-residential Structures Minor Localized Flood Reduction Projects Structural Retrofitting of Existing Buildings Non-structural Retrofitting of Existing Buildings and Facilities Safe Room Construction Infrastructure Retrofit Soil Stabilization Wildfire Mitigation Post-Disaster Code Enforcement 5% Initiative Projects Hazard Mitigation Planning	Mitigation Projects √ Property Acquisition and Structure Demolition √ Property Acquisition and Structure Relocation √ Structure Elevation √ Mitigation Reconstruction √ Dry Floodproofing of Historic Residential Structures √ Dry Floodproofing of Non-residential Structures √ Minor Localized Flood Reduction Projects √ Structural Retrofitting of Existing Buildings √ Non-structural Retrofitting of Existing Buildings and Facilities √ Safe Room Construction √ Infrastructure Retrofit √ Soil Stabilization √ Wildfire Mitigation √ Post-Disaster Code Enforcement √ 5% Initiative Projects √ Hazard Mitigation Planning √	Mitigation Projects $\sqrt{}$ $\sqrt{}$ Property Acquisition and Structure Demolition $\sqrt{}$ $\sqrt{}$ Property Acquisition and Structure Relocation $\sqrt{}$ $\sqrt{}$ Structure Elevation $\sqrt{}$ $\sqrt{}$ Mitigation Reconstruction $\sqrt{}$ $\sqrt{}$ Dry Floodproofing of Historic Residential Structures $\sqrt{}$ $\sqrt{}$ Dry Floodproofing of Non-residential Structures $\sqrt{}$ $\sqrt{}$ Minor Localized Flood Reduction Projects $\sqrt{}$ $\sqrt{}$ Structural Retrofitting of Existing Buildings $\sqrt{}$ $\sqrt{}$ Non-structural Retrofitting of Existing Buildings and Facilities $\sqrt{}$ $\sqrt{}$ Safe Room Construction $\sqrt{}$ $\sqrt{}$ Infrastructure Retrofit $\sqrt{}$ $\sqrt{}$ Soil Stabilization $\sqrt{}$ $\sqrt{}$ Post-Disaster Code Enforcement $\sqrt{}$ 5% Initiative Projects $\sqrt{}$ Hazard Mitigation Planning $\sqrt{}$	Mitigation Projects $$ $$ $$ Property Acquisition and Structure Demolition $$ $$ $$ Property Acquisition and Structure Relocation $$ $$ $$ Structure Elevation $$ $$ $$ Mitigation Reconstruction $$ $$ $$ Dry Floodproofing of Historic Residential Structures $$ $$ $$ Dry Floodproofing of Non-residential Structures $$ $$ $$ Minor Localized Flood Reduction Projects $$ $$ $$ Structural Retrofitting of Existing Buildings $$ $$ Non-structural Retrofitting of Existing Buildings and Facilities $$ $$ Safe Room Construction $$ $$ Infrastructure Retrofit $$ $$ Soil Stabilization $$ $$ Wildfire Mitigation $$ $$ Post-Disaster Code Enforcement $$ $$ 5% Initiative Projects $$ $$ Hazard Mitigation Planning $$ $$	Mitigation Projects √ ✓

Additional information regarding eligible projects for HMGP is included in Part VIII A.8 and A.9; for FMA, see Part VIII C.3; for RFC, see Part VIII D.1; and for SRL, see Part VIII E.1.

Costs for eligible activities must be reasonable, allowable, allocable, and necessary as required by 2 CFR Part 225, Cost Principles for State, Local, and Indian Tribal Governments, 44 CFR Section 13.22, applicable program regulations, and this guidance.

The following activities are not eligible as stand-alone activities but are eligible only when included as a functional component of eligible mitigation activities:

- ◆ For HMGP and PDM, permanently installed generators and/or related equipment purchases (e.g., generator hook-ups), when the generator directly relates to the hazards being mitigated and is part of a project (the 5% Initiative allows for the stand-alone purchase of permanently installed generators);
- Real property or easements purchases required for the completion of an eligible mitigation project. For safe room projects, no real property or easement purchase is eligible; and
- Studies that are integral to the development and implementation of a mitigation project, including hydrologic and hydraulic, engineering, or drainage studies.

D.1.1 Mitigation Projects

This section briefly describes the mitigation projects eligible under one or more of the five HMA programs. Table 4 summarizes the eligibility of the following project types for each program:

- ◆ Property Acquisition and Structure Demolition The voluntary acquisition of an existing at-risk structure and, typically, the underlying land, and conversion of the land to open space through the demolition of the structure. The property must be deed-restricted in perpetuity to open space uses to restore and/or conserve the natural floodplain functions. For property acquisition and structure demolition projects, see Part IX A.
- Property Acquisition and Structure Relocation The voluntary physical relocation of an existing structure to an area outside of a hazard-prone area, such as the Special Flood Hazard Area (SFHA) or a regulatory erosion zone and, typically, the acquisition of the underlying land. Relocation must conform to all applicable State and local regulations. The property must be deed-restricted in perpetuity to open space uses to restore and/or conserve the natural floodplain functions. For property acquisition and structure relocation projects, see Part IX A.
- ♦ Structure Elevation Physically raising an existing structure to the Base Flood Elevation (BFE) or higher if required by FEMA or local ordinance. Structure elevation may be achieved through a variety of methods, including elevating on continuous foundation walls; elevating on open foundations, such as piles, piers, posts, or columns; and elevating on fill. Foundations must be designed to properly address all loads and be appropriately connected to the floor structure above, and utilities must be properly elevated as well. FEMA encourages Applicants and subapplicants to design all structure elevation projects in accordance with the American Society of Civil Engineers/Structural Engineering Institute (ASCE/SEI) 24-05, Flood Resistant Design and Construction. For additional information about structure elevation projects, see Part IX E.
- ♦ Mitigation Reconstruction The construction of an improved, elevated building on the same site where an existing building and/or foundation has been partially or completely demolished or destroyed. Mitigation reconstruction is only permitted for structures outside of the regulatory floodway or coastal high hazard area (Zone V) as identified by the existing best available flood hazard data. Activities that result in the construction of new living space at or above the BFE will only be considered when consistent with the Mitigation Reconstruction requirements. Such activities are only eligible under SRL.
 - Mitigation reconstruction projects cannot be combined with other activity types within the same project subapplication. To ensure the subapplication scope, schedule, and budget adhere to programmatic requirements, a mixture of activity types other than mitigation reconstruction within the subapplication is not permitted. Applicants must indicate within the mitigation activity section of their subapplication why they are electing to utilize mitigation reconstruction, and have not chosen the other available activity types. For additional information about mitigation reconstruction projects, see Part IX D.
- ◆ Dry Floodproofing Techniques applied to keep structures dry by sealing the structure to keep floodwaters out. For all dry floodproofing activities, FEMA encourages Applicants and subapplicants to design all dry floodproofing projects in accordance with ASCE/SEI 24-05.

- **Dry Floodproofing of Historic Residential Structures** is permissible only when other techniques that would mitigate to the BFE would cause the structure to lose its status as a Historic Structure, as defined in 44 CFR Section 59.1.
- **Dry Floodproofing of Non-residential Structures** must be performed in accordance with NFIP Technical Bulletin (TB) 3-93, *Non-Residential Floodproofing—*Requirements and Certification, and the requirements pertaining to dry floodproofing of non-residential structures found in 44 CFR Sections 60.3(b)(5) and (c)(4).
- Minor Localized Flood Reduction Projects Projects to lessen the frequency or severity of flooding and decrease predicted flood damages, such as the installation or modification of culverts and stormwater management activities such as creating retention and detention basins. These projects must not duplicate the flood prevention activities of other Federal agencies and may not constitute a section of a larger flood control system.
 - For RFC and SRL, at least 50 percent of the structures directly benefiting from this
 mitigation activity must be NFIP-insured. In addition, these projects must primarily
 benefit RFC or SRL structures, respectively. Documentation must be provided in the
 subapplication to satisfy this requirement.
- ♦ Structural Retrofitting of Existing Buildings Modifications to the structural elements of a building to reduce or eliminate the risk of future damage and to protect inhabitants. The structural elements of a building that are essential to protect in order to prevent damage include foundations, load-bearing walls, beams, columns, building envelope, structural floors and roofs, and the connections between these elements.
- ♦ Non-structural Retrofitting of Existing Buildings and Facilities Modifications to the non-structural elements of a building or facility to reduce or eliminate the risk of future damage and to protect inhabitants. Non-structural retrofits may include bracing of building contents to prevent earthquake damage or the elevation of heating and ventilation systems.
- ◆ Safe Room Construction Safe room construction projects are designed to provide immediate life-safety protection for people in public and private structures from tornado and severe wind events, including hurricanes. For HMA, the term "safe room" only applies to extreme wind (combined tornado and hurricane) residential, non-residential, and community safe rooms; tornado community safe rooms; and hurricane community safe rooms. This type of project includes retrofits of existing facilities or new safe room construction projects, and applies to both single and multi-use facilities. For additional information, see Part IX C.
- ◆ Infrastructure Retrofit Measures to reduce risk to existing utility systems, roads, and bridges.
- ♦ Soil Stabilization Projects to reduce risk to structures or infrastructure from erosion and landslides, including installing geo-textiles, stabilizing sod, installing vegetative buffer strips, preserving mature vegetation, decreasing slope angles, and stabilizing with rip rap and other means of slope anchoring. These projects must not duplicate the activities of other Federal agencies.

- ♦ Wildfire Mitigation Projects to mitigate the risk to at-risk structures and associated loss of life from the threat of future wildfire through:
 - **Defensible Space for Wildfire** Projects creating perimeters around homes, structures, and critical facilities through the removal or reduction of flammable vegetation. For additional information, see Part IX B.3.1.
 - Application of Ignition-resistant Construction Projects that apply ignition-resistant techniques and/or non-combustible materials on new and existing homes, structures, and critical facilities. For additional information, see Part IX B.3.2.
 - **Hazardous Fuels Reduction** Projects that remove vegetative fuels proximate to the at-risk structure that, if ignited, pose significant threat to human life and property, especially critical facilities. For additional information, see Part IX B.3.3.
- ◆ Post-Disaster Code Enforcement Projects designed to support the post-disaster rebuilding effort by ensuring that sufficient expertise is on hand to ensure appropriate codes and standards, including NFIP local ordinance requirements, are utilized and enforced. For additional information, see Part VIII A.8.
- ♦ 5% Initiative Projects These projects provide an opportunity to fund mitigation actions that are consistent with the goals and objectives of the State or Tribal (Standard or Enhanced) and local mitigation plans and meet all HMGP program requirements, but for which it may be difficult to conduct a standard BCA to prove cost effectiveness. For additional information, see Part VIII A.10.

Note: The requirements of Part IX A of this guidance and of 44 CFR Part 80 govern only real property acquisition for open space purposes, and do not apply to real property acquisition associated with other mitigation projects. Unlike acquisition for open space purposes, acquisition associated with the construction of a mitigation project may involve the local jurisdiction's use of its power of eminent domain to take certain, limited property interests necessary to construct the project. Prior to applying for such projects Applicants and subapplicants must consult with FEMA for further direction because different requirements and procedures will apply.

D.1.2 Hazard Mitigation Planning

Mitigation plans are the foundation for effective hazard mitigation. A mitigation plan is a demonstration of the commitment to reduce risks from natural hazards and serves as a strategic guide for decisionmakers as they commit resources.

The mitigation planning process includes hazard identification and risk assessment leading to the development of a comprehensive mitigation strategy for reducing risks to life and property. The mitigation strategy section of the plan identifies a range of specific mitigation actions and projects being considered to reduce risks to new and existing buildings and infrastructure. This section includes an action plan describing how identified mitigation activities will be prioritized, implemented, and administered.

Planning activities funded under HMA are designed to develop State, Tribal, and local mitigation plans that meet the planning requirements outlined in 44 CFR Part 201. A mitigation planning subgrant award must result in a mitigation plan adopted by the jurisdiction(s) and approved by FEMA prior to the end of the Period of Performance (POP).

For **FMA**, funds shall only be used to support the flood hazard portion of State, Tribal, or local mitigation plans to meet the criteria specified in 44 CFR Part 201. Funds are only available to support these activities in communities participating in the NFIP.

For links to mitigation planning and risk assessment resources, see Part X C.2.

D.1.3 Management Costs

Management costs are any indirect costs and administrative expenses that are reasonably incurred by a Grantee or subgrantee in administering a grant or subgrant award.

Eligible Applicant or subapplicant management cost activities may include:

- Solicitation, review, and processing of subapplications and subgrant awards:
- Subapplication development and technical assistance to subapplicants regarding engineering feasibility, BCA, and EHP documentation;
- Geocoding mitigation projects identified for further review by FEMA;
- Delivery of technical assistance (e.g., plan reviews, planning workshops, training) to support the implementation of mitigation activities;
- Managing grants (e.g., quarterly reporting, closeout);
- Technical monitoring (e.g., site visits, technical meetings);
- Purchase of equipment, per diem and travel expenses, and professional development that is directly related to the implementation of HMA programs; and
- Staff salary costs directly related to performing the activities listed above.

Management costs are only awarded in conjunction with project or planning grants and subgrants. For a link to more geocoding information, see Part X C.3. For more information regarding management costs for HMGP, see Part VIII A.4. For PDM, FMA, RFC, and SRL, FEMA may provide up to 25 percent of the Applicant's anticipated management costs, upon the award and final approval of the first subgrant. The remaining management costs will be obligated as additional subgrants are awarded.

D.2 Ineligible Activities

The following list provides examples of activities that are not eligible for HMA funding:

- Projects that do not reduce the risk to people, structures, or infrastructure;
- Projects that are dependent on another phase of a project(s) in order to be effective and/or feasible (i.e., not a stand-alone mitigation project that solves a problem independently or constitutes a functional portion of a solution);
- Projects for which actual physical work such as groundbreaking, demolition, or construction of a raised foundation has occurred prior to award or final approval. Projects for which demolition and debris removal related to structures proposed for acquisition or mitigation reconstruction has already occurred may be eligible when such activities were initiated or completed under the FEMA Public Assistance program to alleviate a health or safety hazard as a result of a disaster;

- Projects for preparedness activities or temporary measures (e.g., sandbags, bladders, geotubes, or portable generators);
- ◆ Projects constructing new buildings or facilities, with the exception of safe room construction and mitigation reconstruction;
- Projects that create revolving loan funds;
- Activities required as a result of negligence or intentional actions, or those intended to remedy a code violation, or the reimbursement of legal obligations such as those imposed by a legal settlement, court order, or State law;
- ♦ All projects located in a CBRS Unit or in OPAs, other than property acquisition and structure demolition or relocation projects for open space under PDM, FMA, RFC, and SRL. For details on property acquisition and structure demolition or relocation projects for open space within a CBRS Unit or OPAs see Part IX A.2;
- Activities on Federal lands or associated with facilities owned by another Federal entity;
- Major flood control projects related to the construction, demolition, or repair of dams, dikes, levees, floodwalls, seawalls, groins, jetties, breakwaters, and erosion projects related to beach nourishment or re-nourishment;
- Projects for hazardous fuels reduction in excess of 2 miles from structures;
- Projects that address unmet needs from a disaster that are not related to mitigation;
- Retrofitting facilities primarily used for religious purposes, such as places of worship (or other projects that solely benefit religious organizations). A place of worship may, however, be included in a property acquisition and structure demolition or relocation project provided that the project benefits the entire community, such as when the whole neighborhood or community is being removed from the hazard area;
- Activities that only address man-made hazards;
- Projects that address, without an increase in the level of protection, operation, deferred or future maintenance, repairs, or replacement of existing structures, facilities, or infrastructure (e.g., dredging, debris removal, replacement of obsolete utility systems, bridges, and facility repair/rehabilitation);
- Projects for the purpose of:
 - Landscaping for ornamentation (trees, shrubs, etc);
 - Site remediation of hazardous materials (with the exception eligible activities, such as the abatement of asbestos and/or lead-based paint and the removal of household hazardous wastes to an approved landfill);
 - Water quality infrastructure;
 - Address ecological or agricultural issues;
 - Protection of the environment and/or watersheds;
 - Forest management;

- Prescribed burning or clear-cutting;
- · Creation and maintenance of fire breaks, access roads, or staging areas; and
- Irrigation systems;
- Mapping, flood studies, and planning activities, such as plan revisions/amendments or risk assessments, when they do not result in a FEMA-approved mitigation plan;
- Studies not directly related to the design and implementation of a proposed mitigation project; and
- ◆ Preparedness measures and response equipment (e.g., response training, electronic evacuation road signs, interoperable communications equipment).

All projects must also comply with any additional project-specific guidance provided in Part IX.

D.3 Cost Effectiveness

Mitigation projects must be cost effective to be eligible for HMA funding as demonstrated by a FEMA-validated BCA. A BCA evaluates the future benefits (projected losses avoided) of the project in relation to the project costs. This evaluation results in a Benefit-Cost Ratio (BCR). If the future benefits are equal to or greater than the cost, then the BCR is equal to or greater than 1.0 and a proposed activity is considered cost effective. If the benefits are less than the cost, then the BCR is less than 1.0 and the proposed activity is not considered cost effective. Only project subapplications with a BCR of 1.0 or greater will be considered for HMA funding. For purposes of performing the BCA, the total cost must include annual maintenance costs for the proposed mitigation activity even though maintenance costs are not eligible project costs.

For **HMGP** only, an expedited cost-effectiveness determination is available for property acquisition and structure demolition or relocation projects when certain conditions are met. For structures identified in a riverine SFHA on the current effective Flood Insurance Rate Map (FIRM) and declared substantially damaged due to the impacts of flooding by a local authority having such jurisdiction, property acquisition and structure demolition or relocation is considered cost effective and a BCA is not required to be submitted for the structure.

For 5% Initiative subapplications for HMGP funding, a narrative description of the project's cost effectiveness must be provided in lieu of a BCA. For more information on the 5% Initiative, see Part VIII A.10.

FEMA BCA procedures are governed by Office of Management and Budget (OMB) Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*. For additional BCA resources, see Part X C.4.

D.4 Feasibility and Effectiveness Requirement

Mitigation projects funded by HMA must be both feasible and effective at mitigating the risks of the hazard(s) for which the project was designed. A project's feasibility is demonstrated through conformance with accepted engineering practices, established codes, standards, modeling techniques, or best practices. Effective mitigation measures funded under HMA provide a long-term or permanent solution to a risk from a natural hazard.